

## HAC80 - 1835/ UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRS	T NAMED INVENTOR		ATTO	DRNEY DOCKET NO.
09/627,195	07/27/00	ECHOLS		R	990	459 U1 US
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

		Application No.	Applicant(s)
•	•	09/627,195	ECHOLS ET AL.
• •	Office Action Summary	Examiner	Art Unit
		Daniel P Stephenson	3673
Pariod fo	The MAILING DATE of this communication a	appears on the cov r sheet w	ith the correspondence address
Period fo	ORTENED STATUTORY PERIOD FOR REI	PLV IS SET TO EXPIRE 3 M	IONTH(S) FROM
THE - External after - If the - If NO - Failt - Any	MAILING DATE OF THIS COMMUNICATION mesions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by sta reply received by the Office later than three months after the ma ed patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply within the statutory minimum of thir iod will apply and will expire SIX (6) MON tute, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
1)	Responsive to communication(s) filed on _		
2a)□	·	This action is non-final.	
3)	Since this application is in condition for allo closed in accordance with the practice und		
Disposit	ion of Claims		
4)🛛	Claim(s) 1-12 is/are pending in the applicat	ion.	
	4a) Of the above claim(s) is/are without	Irawn from consideration.	
5)	Claim(s) is/are allowed.		
6)⊠	Claim(s) <u>1-12</u> is/are rejected.		
7)	Claim(s) is/are objected to.		
8)[	Claim(s) are subject to restriction and	d/or election requirement.	
Applicat	ion Papers		
9)[	The specification is objected to by the Exam	iner.	
10)	The drawing(s) filed on is/are: a) ac	cepted or b) objected to by t	the Examiner.
	Applicant may not request that any objection to		
11)	The proposed drawing correction filed on		disapproved by the Examiner.
40)[7	If approved, corrected drawings are required in	• •	
•	The oath or declaration is objected to by the	Examiner.	
•	under 35 U.S.C. §§ 119 and 120		0.440(-) (-1) (5)
	Acknowledgment is made of a claim for fore	agn priority under 35 U.S.C.	§ 119(a)-(d) or (f).
a)	☐ All b)☐ Some * c)☐ None of:	ante hava hasa sassivad	
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	2. Certified copies of the priority docume		· · · · · · · · · · · · · · · · · · ·
* (	<ol> <li>Copies of the certified copies of the p application from the International</li> <li>See the attached detailed Office action for a</li> </ol>	Bureau (PCT Rule 17.2(a)).	-
14) 🔲 /	Acknowledgment is made of a claim for dome	estic priority under 35 U.S.C.	§ 119(e) (to a provisional application).
	a)  The translation of the foreign language Acknowledgment is made of a claim for dom		
Attachmer	nt(s)		
2) Noti	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(	5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)

Art Unit: 3673

#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8 and 12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. An expansion tool, which would be able to move through the screen jacket in a top to bottom motion after the screen had been placed above it, is not disclosed in the specification. An activation assembly is also not described within the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 11 are indefinite due to the fact that claim 10 is dependent upon itself.

Correction is required.

Claims 10-12 recites the limitation "screen shroud" in their first lines. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "downhole force generator" in the second line. There is insufficient antecedent basis for this limitation in the claim.

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#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 4, 5, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Haut et al.

Haut et al. (Abstract, Figs. 1, 2, 4, and 5, col. 3 lines 5-39, col. 4 lines 21-34 and 51-61) discloses a method of sand-control in a subterranean well comprising the steps of inserting a screen, pumping a sand control medium between the screen and the borehole, inserting an expansion tool and moving said expansion tool through the screen causing it to expand. It refers to the expansion tool as a "pig" which is common in the art, and said pig can be pushed or drawn through the tubing to expand it.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohbeck in view of Koehler et al.

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Lohbeck (Figs. 1, 2, 5, and 6, col. 2 line 43- col. Col. 3 line 9, col. 4 line 18- 24) discloses a radially expandable wellbore screen (11), which is inserted after an expansion tool (15) is, or alternatively, as provided, inserted after the screen is. Said expansion tool being used to expand the screen against the borehole, by moving through it in an upward manner. Lohbeck does not disclose that a sand-control medium is pumped into the annular space between the screen and the borehole before the screen is expanded. Nor does it disclose that the sand-control medium substantially fills the gap between the screen and borehole, after the screen has been expanded. Koehler et al. (col. 5 line 56-col. 6 line 7) discloses that it is common for a filter for a wellbore to be "gravel packed", by inserting a sand-control medium between a filter and the borehole, after the filter has been inserted. It would have been obvious to one of ordinary skill in the art at the time the invention was made to "gravel pack" as described in Koehler et al. around the screen of Lohbeck. The motivation for doing this would be to provide an easy method of filtration and an additional level of filtration beyond just the filter provided, as taught by Koehler et al. The screen would be expanded after the gravel packing to reduce any gaps within the packing material, and provide a more efficient filter.

Claims 2, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohbeck in view of Koehler et al. as applied to claims 1 and 5 above, and further in view of Worrall et al.

Lohbeck in view of Koehler et al. discloses all the limitations of the above claims except, neither Lohbeck nor Koehler et al. shows that the expander assembly can be used to expand the screen from top to bottom. Worrall et al. (Fig. 7, col. 3 line 49- col. 4 line 4) discloses a method of expansion of a wellbore casing where the expander (7,22) is either used in an upward or downward (22) fashion.

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Claims 3, 6, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohbeck in view of Koehler et al. as applied to claims 1 and 5 above, and further in view of Vincent '483.

Lohbeck in view of Koehler et al. discloses all the limitations of the above claim as previously stated, except, neither Lohbeck nor Koehler et al. shows a downhole force generator operably attached to the expansion cone. Vincent '483 (Fig. 7-10, col. 5 line 45- col. 7 line 4) shows an activated motor assembly (137, 151, 156) attached to a cone (13) used in the radial expansion of a wellbore casing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the motor assembly of Vincent '483 with the downhole system presented by Lohbeck in view of Koehler et al. This would be done to provide greater automation, and is preferred as stated in Vincent '483.

With regards to claims 3, 6, 10, and 11, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a downhole battery with the motor of Vincent '483, to eliminate the need for a downhole powerline.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P Stephenson whose telephone number is (703) 605-4969. The examiner can normally be reached on 7:30 - 5:00 M-TH and every other Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (703) 308-2151. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4180.

DPS September 6, 2001

DAVID BAGNELL SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600

# Notice of References Cited Application/Control No. O9/627,195 Examiner Daniel P Stephenson Applicant(s)/Patent Under Reexamination ECHOLS ET AL. Page 1 of 1

#### U.S. PATENT DOCUMENTS

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*	Document Number Country Code-Number-Kind Code				Classification		
	Α	US-6263966	07-2001	Haut et al.	166	278	
	В	US-5366012	11-1994	Lohbeck	166	277	
	С	US-5348095	09-1994	Worrall et al.	166	380	
	D	US-5664628	09-1997	Koehler et al.	166	369	
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#### FOREIGN PATENT DOCUMENTS

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#### **NON-PATENT DOCUMENTS**

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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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DP3	1,514,062	11/1924	McLain				DF0-
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DP5	3,203,483	08/1965	Vincent		166	207	NOV 0 8 2000
DP5	3,270,817	09/1966	Papaila		166	46 70	3600 MAIL ROOM
DPS	3,353,599	11/1967	Swift		166		WOON TOOM
OP2	3,477,506	11/1969	Malone		166	207	
DPS	3,498,376	03/1970	Sizer et al		166	120	
DPS	3,669,190	06/1972	Sizer et al		166	315	
DPS	3,746,091	07/1973	Owen et al		166	207	
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3,776,307 12/1973 | Young 166 125 4,095,825 06/1978 Butler 285 55 4,687,232 08/1987 Zimmerman 285 31 5,014,779 05/1991 | Meling et al 166 55.7 09/1997 5,667,011 Gill et al 166 295 5,924,745 07/1999 | Campbell 285 90 5,984,568 11/1999 Lohbeck 403 375 01/2000 | Campbell et al 6,012,523 277 166 02/2000 | Wood et al 6,021,850 166 380 6,029,748 02/2000 Forsyth et al 166 380 6,070,671 06/2000 Cumming et al 166 381

**EXAMINER** 

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DPS	WO 98/49423	11/1998	WIPO						
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The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

#### INFORMATION ON HOW TO EFFECT DRAWING CHANGES

#### 1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, MUST be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

#### **Timing of Corrections**

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in ABANDONMENT of the application.

06/01/01